



February 2nd, 2022

Deborah Bickmire
Office of Development Assistance
15151 E. Alameda Parkway
Aurora, Colorado 80012

Re: 56th Avenue Improvements – Responses to Second ISP Submittal Comments

Application Number: DA-2285-00

Case Number: 2021-6037-00

Ms. Bickmire,

Thank you for your notes regarding the second ISP submittal for the 56th Avenue Improvements. The following are staff comments received December 7th, 2021, from the development review team. Olsson Responses are in **GREEN** text.

In addition to addressing City comments, Olsson has made the following changes to the submittal document that are worth noting:

- After additional coordination with the team responsible for the design and construction of the west half of Harvest Road from 56th Avenue to the north, it was determined the 56th Avenue project would likely be constructed first. Because of that, storm sewer installation along Harvest Road from 56th Avenue to the Second Creek crossing will be required as a part of this project. Additional grading and utility sheets were added to depict this information.
- The cross section of Drive 3 (between Denali and Harvest) and its intersection with 56th Avenue was revised slightly to accommodate the needs of the development to the south.
- The cross section of the north leg of Denali Street was revised to be more consistent with the intended driveway-type use based on the expected development to the north.
- The temporary swale on the north side of 56th Avenue from Denali Street to Temporary Pond B was removed from the project – drainage along 56th Avenue being accomplished in curb flowlines down to an inlet that will discharge to the pond.
- Turn bay lengths updated in accordance with revisions to the Windler Master Traffic Study.

Planning Department Comments

Zoning and Land Use Comments

1A. The October 8, 2021 meeting between the applicant and city staff did not agree to a right-of-way width or street section that differed from the approved NEATS section. Several options were discussed, however, Public Works wanted to look at the terms of all applicable annexation agreements. Please work with your case manager to schedule a follow-up meeting with Public Works and Transportation Planning

56th Avenue street section revised to match the standard NEATS section for the corridor. Separated bike and pedestrian paths provided on both the north and south sides of the roadway.

1B. Two property owners are identified on the cover sheet; however, six owners are listed on Sheet 25. The boundary of the site plan needs to be clarified, as well as the ownership.

The property owners on the east side of Harvest Road have been added to the cover sheet. Two of the owners identified on the cover sheet control two properties each as depicted in the right-of-way plans. Refer to cover sheet for additional information. ISP boundary clarified in the plans.

1C. Revise the Letter of Introduction to address the redline comments and to discuss how the proposed site plan meets the approval criteria for a minor site plan found in code Section 146-5.4.3.B.3.c.

City comments on the letter of introduction addressed. Letter also lists the approved planning documents that the project is in compliance with per the guidance outlined in 5.4.3.B.3.c of the Aurora UDO.

Transportation Planning

2A. NEATS designates 56th Avenue as a primary bike route (pg. 69). Separated bike lanes should be reflected on both the north and south sides of 56th Avenue.

56th Avenue street section revised to match the standard NEATS section for the corridor. Separated bike and pedestrian paths provided on both the north and south sides of the roadway.

Completeness and Clarity of the Application

3A. Provide a Legal Description for the ISP boundary and make sure it is clearly illustrated on the plans.

Legal description for boundary added to cover sheet. ISP boundary annotated on plans.

3B. Add the acreage of the ISP area, not the disturbance area. The sum of the areas in the Site Data should equal the site area.

ISP area added and ISP boundary annotated on plans.

3C. Revise the linework for existing and proposed features so they are easier to differentiate.

Plot styles notified for legibility.

Landscape

4A. A full landscape review was not completed due to the many errors found on this first page with wrong plant counts and inaccurate curbside landscape design and requirement table. Many of the comments can be applied to all the landscape sheets. Please double check and correct all new and previous comments to ensure that the landscape review process will not continue to be delayed. Please contact me directly if you have questions on our landscape requirements.

Noted. Olsson coordinated a preliminary re-review of the landscaping plans prior to making the full third submittal.

4B. For each adjacent detention pond along 56th Avenue, please add a gray hatch, and/or matchline and outlined text label that references the specific sheet to see the full detention pond size and landscaping.

Hatch added over pond areas.

4C. The plants in the narrow 5' area cannot be counted toward the curbside landscaping.

Noted.

4D. Label plant groups separately between street blocks.

Plant group labels have been updated.

4E. Add the maintenance access road hatch to the legend with description on material type.

Maintenance access road hatch has been added. Material by others.

4F. Adjust all labels and use text masks so there is no overlap on any lines.

Labels and text have been updated to avoid overlapping.

4G. There are two plant symbols that look very similar when printed. Please either change one of the symbols, or label in groups of continuous runs.

Symbols and labels updated.

4H. Add missing plant labels and fix all overlapping labels.

Labels adjusted.

4I. Label the signs or add them to the legend.

Signs added to legend.

4J. Add missing asphalt hatch.

Hatch added.

4K. Change underground utilities to gray or remove if it does not have an impact on the landscape design. Water stub information is not necessary on the landscape plans and can be removed.

Display updated.

4L. Please match the hatch scale that is used on the plan.

Noted.

4M. Change Plant Legend to Plant Schedule.

Noted.

4N. The curbside landscape table does not need to be on each sheet. It can be placed once on the details & notes sheet.

Noted.

4O. Add dimensions to the curbside landscape areas. This is the area from the back of curb to the edge of sidewalk. Any areas that are less than 10' wide cannot be just grass. Each area less than 10' wide must be landscaped as required in the UDO. Label each area between streets or curb cuts on separate lines in the Curbside Landscape table to show compliance with the specific landscape requirement.

Dimensions added to landscape areas, landscape has been updated accordingly.

4P. Add specific information on the details and notes sheet on the approved grass & grass mix species.

Information has been added to the schedule sheet to specify seed and grass mixes.

4Q. Street trees must be 2.5" caliper minimum.

Noted.

4R. Some of the proposed shrubs are too wide and/or too tall for the area proposed. Please change some of the plant material to something no larger than 5'x5'.

Plant materials have been updated.

4S. Add more information on median cover material type.

Medians have been updated.

4T. Round the required plant totals to the nearest whole number.

Noted.

4U. Change the Street Tree Frontage Table name to Curbside Landscape Table, and add additional columns for: shrubs required, description of requirement (1 shrub per 40 SF), total SF for each segment, and shrubs provided to demonstrate compliance where the curbside landscape is less than 10' wide. Add a note below table(s) explaining why the required plant quantities cannot be met.

Noted.

4V. Road stationing information is not necessary in the landscape plan sheet title and can be removed. Curbside landscape areas should be labeled in segments between each block or street. Therefore, it is much easier and cleaner to just use the street names for the locations. If there is a curb cut without a street name, add a label on the plan such as "Future Street A". For example, the north side of 56th only has two curbside landscape segments that need to be called out individually from left to right:

- 56th North: E470 to Denali St. (or Future Street 'A' if Denali St. will not continue north)

- 56th North: Denali St. to Harvest Rd.

Roadway stationing removed from plans.

4W. Why is the note "<40% plants" in the plant schedule remarks? Any plant material requirement note should be included in the curbside landscape table.

Note removed.

4X. Add street names to the Key Map.

Street names added to key map.

4Y. Locate plants above the 100yr WSEL.

Noted.

4Z. Add a legend to the pond sheets with the different hatches used.

Noted.

4AA. Since temporary detention ponds have an unknown lifespan and may last many years due to economic uncertainty, they now must also meet the same landscape requirement as permanent ponds. Therefore, add the required landscaping to all temporary ponds, give each a unique name and include in the detention pond landscape table.

Noted. Temporary Names have been provided.

4BB. Address all comments and notations on the redlines.

Noted.

Referral Comments from Other Departments and Agencies

Civil Engineering

5A. The site plan will not be approved by public works until the preliminary drainage letter/report is approved.

Noted.

5B. Right-of-way is required to extend minimum 0.5' behind the back of the sidewalk or a sidewalk easement is required. Typical for all sections.

Per meeting and subsequent correspondence with Julie Bingham, it was determined a sidewalk easement would be an acceptable alternative to additional right-of-way dedication. 0.5' sidewalk easement supplied on both sides of 56th Avenue behind the back of walk.

5C. The drainage and access easements are separate easements. The drainage easement encompasses the pond limits and the access easement covers the area from the pond limits to the ROW. Please separate out the easements and revise the labels.

Noted, easements broken out accordingly.

5D. Tracts for any regional ponds or channels are required to be dedicated to COA.

Tracts shown for ponds CTR-1 and U-115 which are regional ponds. Exact tract area to be refined as ponds move to final design.

5E. Show proposed grading tying into existing contours.

Grading revised.

5F. Maintenance access is required both upstream and downstream of culverts with 20' minimum access around all riprap, headwalls and wingwalls at the outlet.

Maintenance access provided to all ponds and outfall culverts. Access to Harvest Road box culverts and headwalls being provided by others.

5G. Per Section 4.05.01 in the Roadway Manual, the minimum allowable grade for any roadway is 0.5%. Less than 0.8% is not recommended.

The grades depicted on the road plans that are less than 0.50% are at crest and sag vertical curves. The labels for slopes less than 0.50% have been removed but grades less than that at crest and sag curves are required. 0.50% grades are necessary in other locations because of the existing 24" water main beneath 56th Avenue. An effort was made to match existing grades as closely as possible and to eliminate cuts. The existing 24" water main was installed at nearly the minimum allowable depth so lowering of the road profile would require avoidable water main modifications.

5H. Add slope labels. The maximum is 3:1 outside of right-of-way; maximum 4:1 inside of right-of-way.

Fill and cut slope labels added. Fill and cut slopes conform to guidance.

5I. Label slope in swales, including side slopes.

Swale to Temporary Pond B being removed from the project, no other swales on the project.

5J. Minimum slope in the bottom of the pond is 2%.

All pond bottom slopes conform to this minimum.

5K. Please show the all-weather surface for maintenance access all the way out to the street to ensure there is no conflict with the landscaping.

Per discussion with Aurora Public Works, opting to show landscape exclusion zones rather than show maintenance access all the way out to the street. See exclusion areas in landscape plans.

Traffic Engineering

6A. Additional discussion is necessary to determine the required right-of-way on the south side of 56th Avenue.

Right-of-way dedicated is consistent with the approved Harvest Mile public improvement plan and that which is required to accommodate the NEATS typical section with separated bike lanes on both sides of the road.

6B. Call-out all pavement markings, solid lane lines, crosswalks, and dashed lane lines. Label all lane widths on each side of intersection, access, median breaks, etc.

Pavement markings annotated. Additional lane width labels added.

6C. Ensure all hatches/symbols are labeled or included in the Legend.

Hatches clarified.

6D. Taper length for 26' median is 176' per COA TE 2.1. Update and callout taper length and taper rate.

Taper length and rate information added to taper callouts.

6E. Add/adjust signage as noted on the redlines.

Signage updated accordingly.

6F. Address all notations and comments on the redlines.

Redline plan comments addressed.

Aurora Water

7A. Ensure access being provided to the top of the outlet structure(s).

Noted.

7B. Label and note that the ponds, forebays, and outlets are private.

These items are proposed to be public and are indicated as such on the plans.

7C. Adjust hydrant(s) to be a minimum of 8-feet away from light poles and future traffic signals.

Hydrant locations adjusted.

7D. The Fulenwider MUS indicates an 18-inch main. Provide back up or other MUS that indicates a 15-inch main is sufficient for all Windler flows.

Documentation is provided in the Windler MUS being submitted the week of 1/31/22.

7E. A manhole is needed at all storm deflections.

Noted, manhole provided at all storm pipe deflections.

7F. Temporary access can be from the public right-of-way, but permanent access to a pond and all structures is to be from internal roads

Noted, access will need to be redefined as the internal roads are developed, depending on when the maintenance easements are dedicated, easements may need to be vacated and new easements dedicated.

Parks, Recreation, and Open Spaces (PROS)

8A. Median landscaping needs to be designed with this submittal. Installation is required with the full median build out and is required to be installed by the developer.

Noted. Median landscaping design included with this resubmittal and installation will be a part of the project.

8B. See redlines on the information that needs to be included in the plan set.

Noted. Median landscaping design coordinated with PROS staff in advance of resubmittal.

8C. Please refer to the PROS Manual for details and update design. It should mirror a more natural aesthetic with groupings and must be a xeric design. See Z-zone plant list through aurora water for the list of approved shrubs and grasses. Refer to completed medians along Arapahoe Road between Aurora Parkway and Gartrell for an example.

Noted. Median landscaping design coordinated with PROS staff in advance of resubmittal.

Real Property

9A. Continue to work with Andy Niquette on the recordation of easements

Noted.

Regards,

A handwritten signature in blue ink, appearing to read "Chris Rolling".

Chris Rolling
Project Manager - Olsson